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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,529	11/25/2003	Anwu Li	M596 0008	9115

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OYEN, WIGGS, GREEN & MUTALA
480 - THE STATION
601 WEST CORDOVA STREET
VANCOUVER, BC V6B 1G1
CANADA

EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT PAPER NUMBER

1725

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/720,529	Applicant(s) LI, ANWU	
	Examiner Lynne Edmondson	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 8 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-6, 13, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Shida et al. (USPN 3648355).

Shida teaches a method of bonding a Pd-Ag foil (Table 1, col 4) to a metallic part by subjection to heat of about 720 to 850 C and pressure of about 71 to about 996 psi in a controlled atmosphere containing an inert gas (col 2 lines 3-69).

3. Claims 1-4, 13, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Steuber et al. (USPN 6464129 B2).

Steuber teaches a method of bonding a Pd membrane to a metallic part by subjection to heat of about 954 to 1204 C and pressure of about 1000 to 1050 psi in a controlled atmosphere containing an inert gas (col 4 lines 5-42).

4. Claims 1, 4-7, 9-11, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Langley (USPN 3428476).

Langley teaches a method of bonding a Pd-Ag foil (col 1 lines 30-34 and col 2 lines 1-5) to a metallic part by subjection to heat of about 1000 C (col 2 line 28) and

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pressure in a controlled atmosphere containing hydrogen (col 2 lines 23-32) for about 24 hours (col 4 lines 59-67).

5. Claims 1, 2, 5, 6, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Juda et al. (USPN 5904754).

Juda teaches a method of bonding a Pd foil to a metallic part by subsection to heat and pressure of about 500 psi in a controlled atmosphere containing hydrogen for about 12 hours (col 3 lines 1-54).

6. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Demaray et al. (USPN 5595337).

Demaray teaches a method of bonding two metal objects which are both polished and subjected to heat and pressure for bonding (tungsten inert gas welding in an inert gas atmosphere (col 15 lines 1-25).

Allowable Subject Matter

7. Claims 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hunt et al. (USPN 6073830, polished metal, heat, pressure, atmosphere), Shimizu et al. (USPN 6405761 B1, polished metal, heat, pressure), Roa et al. (US 2003/0190486 A1, Pd-Ru) and Barnett (USPN 6555778 B1).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson
Primary Examiner
Art Unit 1725

LYNNE R. EDMONDSON
PRIMARY EXAMINER

LAO
9/23/04

LRE